

# Availability of Nearshore Prey to Steller Sea Lions At Two Haulouts in Southeastern Alaska

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## The Problem

Steller sea lion (SSL) abundance is decreasing in central and western Alaska, but is increasing in southeastern Alaska. Reasons for the decline in part of their range are unknown, but may be related to decreased prey availability and lower diet diversity.

In 2001, prey studies were initiated near two SSL haulouts in southeastern Alaska to serve as a comparison to similar studies in central and western Alaska where SSL are declining. This is the 2<sup>nd</sup> year of a 3-year study.

## Objectives

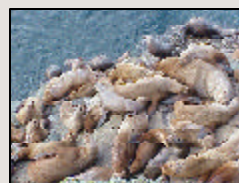
- Identify prey available to SSL in summer and winter in nearshore waters <100 m deep
- Measure relative abundance and composition of prey

## Study sites

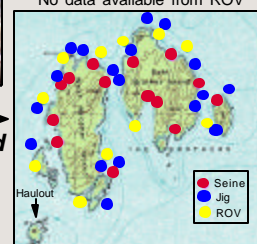
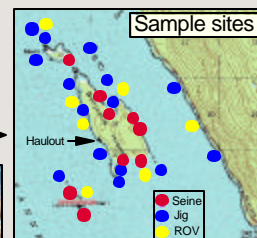


Sites were sampled in July 2001 and 2002, and in March 2002.

Benjamin Island is a **seasonal** haulout (November-May) for up to 800 SSL.



Brothers Islands provide a **year-round** haulout for nearly 1,300 SSL.



## Seining



Sand lance



Juvenile pollock

## Jigging

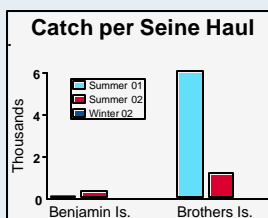


Pacific cod

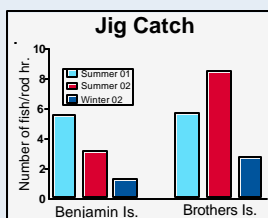


Dusky rockfish

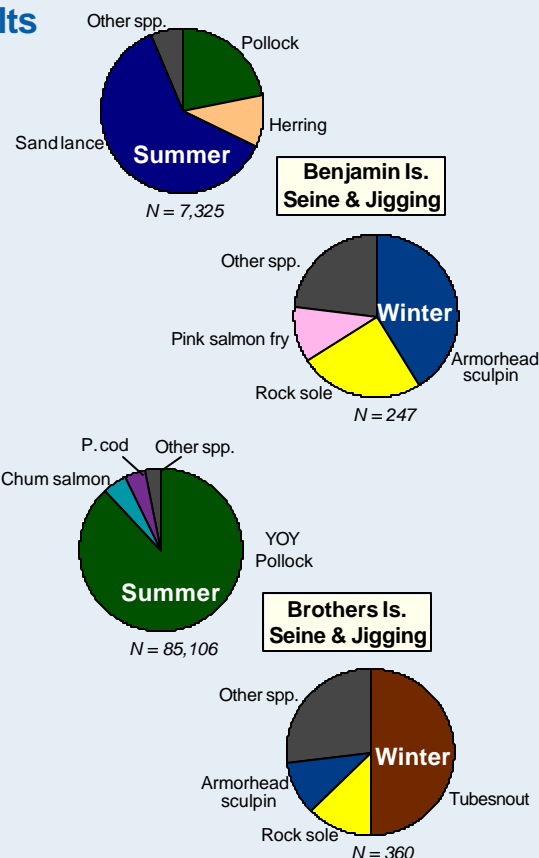
## Results



Mostly juvenile stages (<100 mm FL) of SSL prey and non-prey species captured with seine; fewer fish in winter



Larger SSL prey and non-prey species (>190 mm FL) captured with jigs; fewer fish in winter



## Conclusions

- SSL eat 16 spp. that we captured--in summer, some of the most abundant spp. that we captured also had the highest frequency of occurrence in SSL scat (overall, 37 fish spp. available in summer and 25 spp. in winter).
- The nearshore provides important habitat for SSL prey, especially in summer--less available prey in winter may force SSL to travel farther from haulouts to forage.